

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A method for improving transmission performance of a ~~Transport Layer Protocol (TLP)~~ transport layer protocol connection that uses a data transmission service of a bearer, comprising:

monitoring transport layer data traffic in relation to transmission capacity of said ~~TLP~~ transport layer protocol connection, and

dynamically adjusting a ~~transmission~~ said transmission capacity of said bearer according to said monitored data traffic of said ~~TLP~~ transport layer protocol connection

wherein said bearer provides uplink and downlink transmission capacity,

wherein said data traffic of said transport control protocol connection comprises uplink and downlink data traffic that is separately monitored, and

wherein said uplink and downlink transmission capacity is at least partially separately adjusted according to said monitored respective uplink and downlink data traffic.

wherein said uplink and downlink data traffic is at least partially asymmetric.

2. (Currently Amended) The method according to claim 1, wherein said ~~TLP~~ transport layer protocol is a ~~Transport Control Protocol (TCP)~~ transport control protocol or a ~~User Datagram Protocol (UDP)~~ user datagram protocol.

3. (Currently Amended) The method according to claim 1, wherein transmission capacity adjustment information is signaled from at least one ~~TLP~~ transport control protocol instance to at least one bearer instance.

4. (Cancelled)

5. (Cancelled)

6. (Currently Amended) The method according to claim 1, wherein said data traffic of said ~~TLP-transport layer protocol~~ connection is monitored at least partially by monitoring a state of at least one ~~TLP-transport layer protocol~~ segment buffer.
7. (Currently Amended) The method according to claim 1, wherein said data traffic of said ~~TLP-transport layer protocol~~ connection is monitored at least partially by monitoring data input to at least one ~~TLP-transport layer protocol~~ socket.
8. (Original) The method according to claim 1, wherein said bearer is a packet-switched or circuit-switched bearer.
9. (Original) The method according to claim 1, wherein said bearer is at least partially based on wireless transmission.
10. (Currently Amended) The method according to claim 1, wherein said bearer is a ~~High-Speed Circuit-Switched Data (HSCSD)~~ high-speed circuit switched data bearer of a ~~Global System for Mobile Communication (GSM)~~ global system for mobile communication or of a derivative thereof.
11. (Currently Amended) The method according to claim 10, wherein said transmission capacity of said bearer is adjusted according to said monitored data traffic of said ~~TLP-transport layer protocol~~ connection by changing a maximum number of traffic channels, at least one air interface user rate parameter, or both.
12. (Currently Amended) The method according to claim 11, wherein said change is performed by using a ~~Call Control (CC)~~ User-Initiated Service Level (UISL) call control user initiated service level up- and downgrading procedure.
13. (Currently Amended) The method according to claim 1, wherein said bearer is a ~~General Packet Radio Service (GPRS)~~ general packet radio service bearer or an ~~Enhanced GPRS (EGPRS)~~ enhanced bearer of a ~~Global System for Mobile~~

~~Communications (GSM)~~ global system for mobile communication or of a derivative thereof.

14. (Currently Amended) The method according to claim 13, wherein said transmission capacity of said bearer is adjusted according to said monitored data traffic of said ~~TLP-transport layer protocol~~ connection by influencing a ~~Temporary Block Flow (TBF)~~ temporary block flow setup.

15. (Currently Amended) The method according to claim 1, wherein said bearer is a bearer that uses ~~Code Division Multiple Access (CDMA)~~ code division multiple access as medium access technique, in particular a bearer of an IS-95 system or of a derivative thereof.

16. (Currently Amended) The method according to claim 1, wherein said bearer is a ~~Universal Mobile Telecommunications System (UMTS)~~ universal mobile telecommunications system bearer or a bearer of a derivative of said system.

17. (Currently Amended) A computer program stored on a computer readable medium with instructions operable to cause a processor to perform the method steps of claim 1.

18. (Currently Amended) A computer readable medium having a computer program ~~product comprising a computer program stored thereon~~ with instructions operable to cause a processor to perform the method steps of claim 1.

19. (Currently Amended) A device for improving transmission performance of a ~~Transport Layer Protocol (TLP)~~ transport layer protocol connection that uses a data transmission service of a bearer, comprising:

~~means a transport layer monitor~~ for monitoring data traffic in relation to transmission capacity of said TLP-transport layer protocol connection, and

~~means a resource allocation device~~ for dynamically adjusting the transmission capacity of said bearer according to said monitored data traffic of said TLP-transport layer protocol connection

wherein said bearer provides uplink and downlink transmission capacity,

wherein said data traffic of said transport control protocol connection comprises uplink and downlink data traffic that is separately monitored, and

wherein said uplink and downlink transmission capacity is at least partially separately adjusted according to said monitored respective uplink and downlink data traffic.

wherein said uplink and downlink data traffic is at least partially asymmetric.

20. (Currently Amended) A mobile terminal using a ~~Transport Layer Protocol~~ (TLP-transport layer protocol) connection that uses a data transmission service of a bearer, comprising:

~~means a transport layer monitor~~ for monitoring data traffic in relation to transmission capacity of said TLP-transport layer protocol connection, and

~~means a resource allocation device~~ for dynamically adjusting transmission capacity of said bearer according to said monitored data traffic of said TLP-transport layer protocol connection

wherein said bearer provides uplink and downlink transmission capacity,

wherein said data traffic of said TLP transport layer protocol connection comprises uplink and downlink data traffic that is separately monitored in relation to transmission capacity, and

wherein said uplink and downlink transmission capacity is at least partially separately adjusted according to said monitored respective uplink and downlink data traffic

wherein said uplink and downlink data traffic is at least partially asymmetric.

21. (Currently Amended) The ~~device~~mobile terminal according to claim 20, wherein said TLP-transport layer protocol is a ~~Transport Control Protocol (TCP)~~ transport control protocol or a ~~User Datagram Protocol (UDP)~~ user datagram protocol.

22. (Currently Amended) The ~~device~~mobile terminal according to claim 20, ~~further comprising means for signaling configured to signal~~ transmission capacity adjustment information from at least one TLP-transport layer protocol instance to at least one bearer instance.

23. (Cancelled)

24. (Original) The device according to claim 23, wherein said uplink and downlink data traffic is at least partially asymmetric.

25. (Currently Amended) The ~~device~~mobile terminal according to claim 20, wherein said data traffic of said TLP-transport layer protocol connection is monitored at least partially by monitoring a state of at least one TLP-transport layer protocol segment buffer.

26. (Currently Amended) The ~~device~~mobile terminal according to claim 20, wherein said data traffic of said TLP-transport layer protocol connection is monitored at least partially by monitoring data input to at least one TLP-transport layer protocol socket.

27. (Currently Amended) The ~~device~~mobile terminal according to claim 20, wherein said bearer is a packet-switched or circuit-switched bearer.

28. (Currently Amended) The ~~device~~mobile terminal according to claim 20, wherein said bearer is at least partially based on wireless transmission.

29. (Currently Amended) The ~~device~~mobile terminal according to claim 20, wherein said bearer is a ~~High-Speed Circuit Switched Data (HSCSD)~~ high-speed circuit switched data bearer of a ~~Global System for Mobile Communication (GSM)~~ global system for mobile communication or of a derivative thereof.

30. (Currently Amended) The ~~device~~mobile terminal according to claim 20, wherein said bearer is a ~~General Packet Radio Service (GPRS)~~general packet radio service bearer or an ~~Enhanced GPRS (EGPRS)~~enhanced bearer of a ~~Global System for Mobile Communications (GSM)~~global system for mobile communications or of a derivative thereof.

31. (Currently Amended) The ~~device~~mobile terminal according to claim 20, wherein said bearer is a bearer that uses ~~Code Division Multiple Access (CDMA)~~code division multiple access as ~~medium~~a medium access technique, in particular a bearer of an IS-95 system or of a derivative thereof.

32. (Currently Amended) The ~~device~~mobile terminal according to claim 20, wherein said bearer is a ~~Universal Mobile Telecommunications System (UMTS)~~universal mobile telecommunications system bearer or a bearer of a derivative of said system.

33. (Currently Amended) A system, comprising:  
at least one terminal, and  
at least one network interface,  
wherein said at least one terminal and said at least one network interface use a ~~Transport Layer Protocol (TLP)~~transport layer protocol connection that uses a data transmission service  
of a bearer,  
wherein data traffic of said ~~TLP~~transport layer protocol connection is monitored in relation to transmission capacity and  
wherein ~~a transmission~~said transmission capacity of said bearer is dynamically adjusted according to said monitored data traffic of said ~~TLP~~transport layer protocol connection  
wherein said bearer provides uplink and downlink transmission capacity,  
wherein said data traffic of said transport control protocol connection  
comprises uplink and downlink data traffic that is separately monitored, and

wherein said uplink and downlink transmission capacity is at least partially  
separately adjusted according to said monitored respective uplink and downlink data  
traffic.